

In the specification:

Please amend the specification as follows.

Between paragraphs [0001] and [0002], please change the section heading as follows"

~~Summary of the Invention~~ Background of the Invention.

Between paragraphs [0015] and [0016], please insert the section heading as follows:

Summary of the Invention

Please replace original paragraph [0002] with the following:

**[0002]** An ~~information~~ information apparatus refers to both stationary computers and mobile computing devices (pervasive devices). Examples of information apparatuses include without limitation desktop computers, laptop computers, palmtop (hand-held) computers, personal digital assistants (PDAs), Internet-enabled cellular phones, smart phones, pagers, Internet appliances, e-books, digital pads, Web pads, and digital capturing devices (e.g., digital cameras and video cameras). An output device 140 may include a fax machine, printer, copier, image or video display device, projector, and an audio output device.

Please replace original paragraph [0073] with the following:

**[0073]** When a RIP 902 is located inside an output device 140, the RIP 902 is usually included in a printer controller 910 that may, for example, interpret, convert and/or rasterize input print data into a final format, language or instructions that printer engine 908 can understand. A laser printer with a faster printing speed is an example that falls in this category. For example, a PostScript printer controller 910 may contain a postscript interpreter (~~not shown~~) 901 and a raster image processor 902 (RIP). Postscript interpreter interpret 901 interprets the postscript language and the raster image processor 902 may

process the digital document and converting it to a printer specific format, language or instructions that can be accepted by the printer engine 908. In this example, a device-dependent printer driver (e.g., a Postscript driver, not shown) may be needed in the information apparatus 100 to convert digital document from its original format into print data (e.g. in PostScript) that is acceptable to the printer controller 910.

Please replace original paragraph [0099] with the following:

**[0099]** Fig. 4A shows that output controller 120 may be cascaded externally to one or more printers (only one shown). Information apparatus 100 communicates with output controller 120A, which then communicates with output device such as a printer 104A 140A. The communication link between the output controller 120A and the printer 140A may be a wired link or a wireless link, as described above.

Please replace original paragraph [00131] with the following:

**[00131]** In step 602, based on some or all of the information provided, the user may choose one or more output devices to take the print request or print job. On the other hand, the user may choose to decline the output service offered, and choose not to output the document or content to any of those devices. In this case, alternatives may be provided to the user as previously described with reference to step 508 (~~Fig. 508~~) (Fig. 5).

Please replace original paragraph [00107] with the following:

**[00107]** Fig 5 illustrates one embodiment of output process 501 using a printer as primary output device 140. It should be recognized, however, the following described process can be similarly applied to other output devices 140 such as fax machines, digital copiers, display screens, monitors, TVs, voice output devices, etc